

Arts & Economic Prosperity

Boulder, Colorado

Report Summary

Arts & Economic Prosperity is a study of the economic impact of the nation's nonprofit arts organizations and their audiences. It provides compelling new evidence that the nonprofit arts are a significant industry in Boulder—one that generates \$19.1 million in local economic activity. This spending—\$7.9 million by nonprofit arts organizations and an additional \$11.3 million in event-related spending by their audiences—supports 594 full-time jobs, generates \$11.9 million in household income to local residents, and delivers \$1.2 million in local and state government revenue. This economic impact study sends a strong signal that when we support the arts, we not only enhance our quality of life, but also invest in Boulder's economic well being.

Boulder is one of 91 communities that participated in *Arts & Economic Prosperity*, the most comprehensive study of its kind ever conducted. Detailed expenditure data were collected from 3,000 arts organizations and 40,000 arts attendees in 91 communities across 34 states. Project economists customized input/output models for each of the 91 communities to provide specific and reliable data about the impact of the arts in each community. The study focused solely on the economic impact of the nonprofit arts organizations and event-related spending by their audiences. Not included in the study was spending by individual artists, the for-profit arts and entertainment sector (e.g., Broadway or the motion picture industry), and arts produced by non-arts organizations (e.g., schools or community centers). The objective of this study was to document the experience of a cross-section of American communities and demonstrate what is gained economically from investing in the arts.

Table 1: Total Economic Impact of the Nonprofit Arts Industry in Boulder, CO
(Spending by both Nonprofit Arts Organizations and Their Audiences)

	Boulder, CO	Average of Similarly Populated Communities (50,000 to 99,999)	Average of All 91 Communities
Total Expenditures	\$19,141,140	\$35,019,237	\$75,089,990
Full-Time Equivalent Jobs	594	1,118	2,387
Resident Household Income	\$11,870,000	\$20,359,733	\$51,914,667
Local Government Revenue	\$530,000	\$1,129,533	\$2,835,240
State Government Revenue	\$663,000	\$2,135,533	\$4,534,449

For purposes of this study, economic impact is defined as the following:

- **Full-Time Equivalent (FTE) Jobs** describes the total amount of labor employed. Economists measure FTE jobs, not the total number of employees, because it is a more accurate measure and accounts for part-time employment.
- **Resident Household Income (often called Personal Income)** includes salaries, wages, and entrepreneurial income paid to local residents. It is the money residents earn and use to pay for food, mortgages, and other living expenses.
- **Revenue to Local and State Government** includes funds to city, county, and state governments, schools, and special districts. It's not exclusively taxes (e.g., income, property or sales) and also includes license fees, utility fees, filing fees, etc.

Economic Impact of Nonprofit Arts Organizations in Boulder, CO

Arts organizations are responsible members of the business community. They are employers, producers, consumers, members of the chamber of commerce, and key participants in the marketing and promotion of their cities and regions. Spending by nonprofit arts organizations in Boulder was \$7.9 million in fiscal 2000. The impact of this spending is far reaching: arts organizations pay their employees, purchase supplies, contract for services, and acquire assets within the local community. These actions, in turn, support local jobs, create household income, and generate revenue to the local, state, and federal governments.

Data were collected from 46 nonprofit arts organizations in Boulder. Each provided detailed budget information about more than 40 expenditure categories for fiscal 2000 (e.g., labor, local and non-local artists, operations, materials, facilities, and asset acquisition) as well as their total attendance figures.

Table 2: Economic Impact of Spending by Nonprofit Arts Organizations in Boulder, CO

	Boulder, CO	Average of Similarly Populated Communities (50,000 to 99,999)	Average of All 91 Communities
Total Expenditures	\$7,864,302	\$11,212,607	\$35,370,346
Full-Time Equivalent Jobs	214	352	1,008
Resident Household Income	\$5,471,000	\$8,032,000	\$27,734,011
Local Government Revenue	\$214,000	\$264,737	\$1,408,780
State Government Revenue	\$224,000	\$501,579	\$1,421,099

Economic Impact of Nonprofit Arts Audiences in Boulder, CO

The nonprofit arts, unlike most industries, leverage significant amounts of event-related spending by their audiences. Attendance at arts events generates related commerce for local businesses such as hotels, restaurants, and retail stores. For example, when patrons attend a performing arts event, they may park their car in a toll garage, purchase dinner at a restaurant, eat dessert after the show, and return home and pay the babysitter.

To measure the impact of nonprofit arts audiences in Boulder, data were collected from 236 event attendees during 2001. Researchers used an audience-intercept methodology, a standard technique in which the interviewer asks a patron to complete a written survey about their event-related spending while attending the arts event. To ensure reliability of the data, surveys were collected at a diverse sample of events in each community—ranging from museum exhibitions and arts festivals to opera performances and children’s theater productions.

The 46 nonprofit arts organizations that participated in the study reported that their total attendance to nonprofit arts events during 2000 was 575,103. These 575,103 attendees spent a total of \$11.3 million—an average of \$19.61 per person, per event, *not including the cost of admission*. The following is the economic impact of this spending:

Table 3: Economic Impact of Spending by Nonprofit Arts Audiences in Boulder, CO
(Not Including the Cost of Event Admission)

	Boulder, CO	Average of Similarly Populated Communities (50,000 to 99,999)	Average of All 75 Communities
Total Expenditures	\$11,276,838	\$21,935,545	\$41,404,149
Full-Time Equivalent Jobs	380	708	1,380
Resident Household Income	\$6,399,000	\$11,149,800	\$24,849,040
Local Government Revenue	\$316,000	\$836,867	\$1,761,571
State Government Revenue	\$439,000	\$1,550,067	\$3,006,649

Out-of-Towners Spend More

In addition to spending data, survey respondents were asked to provide their home zip codes, enabling researchers to determine which attendees were local (i.e., reside within the county in which the event occurred) and which were non-local (reside outside the county). In Boulder, 86.9% percent of the 575,103 nonprofit arts attendees were local; 13.1% percent were non-local.

Table 4: Event-Related Spending by Arts Audiences Totaled \$11.3 million in Boulder, CO
(Not Including the Cost of Event Admission)

	Resident Arts Attendees	Non-Resident Arts Attendees	All Arts Attendees
Attendance to Nonprofit Arts Events	499,765	75,338	575,103
Percentage of Resident/Non-Resident Attendees	86.9%	13.1%	100.0%
Average Dollars Spent Per Attendee	\$16.86	\$37.84	\$19.61
Total Event-Related Spending	\$8,426,030	\$2,850,809	\$11,276,838

Non-local arts attendees spent an average of 124% percent more than local attendees (\$37.84 vs. \$16.86). As would be expected from a traveler, higher spending was found in the categories of lodging, meals, retail, and transportation. These data demonstrate that when a community attracts cultural tourists, it stands to harness significant economic rewards.

Table 5: Nonprofit Arts Event Attendees Spend an Average of \$19.61 Per Person in Boulder, CO
(Not Including the Cost of Event Admission)

	Resident Arts Attendees	Non-Resident Arts Attendees	All Arts Attendees
Refreshments/Snacks During the Event	\$0.14	\$0.21	\$0.15
Meals Before/After the Event	\$9.85	\$14.86	\$10.51
Gifts/Souvenirs Purchased at the Event	\$0.39	\$2.84	\$0.71
Clothing/Accessories for the Event	\$1.26	\$2.42	\$1.41
Ground Transportation	\$1.11	\$4.46	\$1.55
Event-Related Child Care	\$0.06	\$0.00	\$0.05
Overnight Lodging (one night only)	\$0.00	\$8.06	\$1.06
Miscellaneous	\$4.05	\$4.99	\$4.17
Total Per Person Event-Related Spending	\$16.86	\$37.84	\$19.61

Estimating Your Local Economic Impact

Economic Impact Per \$100,000 of Spending by Nonprofit Arts Organizations

To make it easier to compare the economic impacts of different organizations and communities, the project researchers calculated the economic impact per \$100,000 of local spending by nonprofit arts organizations. Thus, for every \$100,000 in spending by a nonprofit arts organization, there was the following total economic impact in Boulder.

Table 6: Economic Impact Per \$100,000 of Spending by Nonprofit Arts Organizations in Boulder, CO

	Boulder, CO	Average of Similarly Populated Communities (50,000 to 99,999)	Average of All 91 Communities
Full-Time Equivalent Jobs	2.72	3.36	3.12
Resident Household Income	\$69,568	\$75,726	\$76,842
Local Government Revenue	\$2,721	\$2,841	\$3,167
State Government Revenue	\$2,848	\$5,168	\$4,758

The following is an example of how to use this table:

An administrator from a nonprofit arts organization in Boulder that has total expenditures of \$1 million wants to determine the organization's economic impact on full-time equivalent employment on Boulder. The administrator would:

- (1) Determine the amount spent by the arts organization;
- (2) Divide the expenditure by 100,000; and
- (3) Multiply that figure by the economic impact results for Boulder per \$100,000.

Thus, \$1,000,000 divided by 100,000 equals 10; ten times 2.72 (from Table 6) equals a total of 27.2 full-time equivalent jobs supported within Boulder by that nonprofit arts organization. The same estimate can be made for household income and revenues to local and state government.

Economic Impact Per \$100,000 of Spending by Nonprofit Arts Audiences

The impact of event-related spending by arts audiences can be derived similarly to the calculation of economic impact for nonprofit arts organizations. The first step is to determine the total event-related spending by attendees to arts events (excluding the cost of admission).

The average per person event-related expenditure is multiplied by the total attendance to your organization's arts events. This will provide the estimated total amount of event-related audience spending. Using this total dollar figure, the following table can be used to determine the economic impact of audience spending. Thus, every \$100,000 of event-related spending by nonprofit arts audiences generates the following total economic impact on Boulder:

Table 7: Average Event-Related Spending Per Person by Arts Event Attendees in Boulder, CO
(Not Including the Cost of Event Admission)

	Boulder, CO	Average of Similarly Populated Communities (50,000 to 99,999)	Average of All 75 Communities
Refreshments/Snacks During the Event	\$0.15	\$2.08	\$2.44
Meals Before/After the Event	\$10.51	\$7.63	\$7.89
Gifts/Souvenirs Purchased at the Event	\$0.71	\$3.90	\$3.51
Clothing/Accessories for the Event	\$1.41	\$2.21	\$2.19
Ground Transportation	\$1.55	\$2.48	\$2.63
Event-Related Child Care	\$0.05	\$0.20	\$0.33
Overnight Lodging (one night only)	\$1.06	\$2.08	\$2.55
Miscellaneous	\$4.17	\$1.51	\$1.33
Total Per Person Event-Related Spending	\$19.61	\$22.10	\$22.87

Table 8: Economic Impact Per \$100,000 of Spending by Nonprofit Arts Audiences in Boulder, CO
(Not Including the Cost of Event Admission)

	Boulder, CO	Average of Similarly Populated Communities (50,000 to 99,999)	Average of All 75 Communities
Full-Time Equivalent Jobs	3.37	3.38	3.38
Resident Household Income	\$56,745	\$51,266	\$55,795
Local Government Revenue	\$2,802	\$3,215	\$3,997
State Government Revenue	\$3,893	\$7,827	\$7,334

The following is an example of how to use Table 8:

An administrator wants to determine the economic impact of his organization's 25,000 arts event attendees on full-time equivalent employment in Boulder. The administrator would:

1. Determine the total audience spending by multiplying the average per person expenditure for Boulder by the total attendance;
2. Divide the total audience spending amount by 100,000; and
3. Multiply that figure by the economic impact results for Boulder per \$100,000.

Thus, 25,000 times \$19.61 (from Table 7) equals \$490,250; \$490,250 divided by 100,000 equals 4.9025; 4.9025 times 3.37 FTE Jobs (from Table 8) equals a total of 16.5 full-time equivalent jobs supported within Boulder. The same estimates can be made for household income and revenue to local and state government.

Arts Volunteerism and In-Kind Contributions: An Economic Impact Beyond Dollars

Arts & Economic Prosperity reveals a significant contribution to nonprofit arts organizations as a result of volunteerism. In 2000, 3,491 arts volunteers donated 106,450 hours to Boulder's nonprofit arts organizations. This represents a donation of time with an estimated value of \$1,639,330 (Independent Sector values the average 2000 volunteer hour at \$15.40).¹ While these arts volunteers may not have an economic impact as defined in this study, they clearly have an enormous impact on their communities by assisting in keeping arts organizations functioning as a viable industry.

The nonprofit arts organizations surveyed for this study were also asked about the sources and value of their in-kind support (donated assets and/or services such as office space, airfare, or advertising space). The 46 responding nonprofit arts organizations in Boulder received in-kind contributions with a total value of \$907,640 during 2000 from corporations, local government, local arts agencies, the state arts agency, individuals, and other sources.

Surveys of Arts Organizations

Each of the 91 communities identified their local universe of eligible nonprofit arts organizations and coded those organizations using the Urban Institute's National Taxonomy of Exempt Entities coding system. The eligible organizations received a survey during calendar year 2001 to collect detailed information about their fiscal 2000 expenditures (labor, local and non-local artists, operations, materials, facilities, and asset acquisition) as well as their attendance figures. Additionally, public arts councils, public presenting facilities or institutions, and embedded organizations that have their own budget were included where they play a substantial role in the cultural life of the community. The responding organizations vary widely, ranging from opera companies, public radio stations, and historical museums to weaving societies, choral groups, and arts service organizations. The responding organizations had annual budgets ranging from \$0 to \$76.6 million. Response rates for the 91 communities averaged 47.4 percent, and ranged from below 20 percent to a full 100 percent. Each community's results are based solely on the actual survey data collected from nonprofit arts organizations, not on fiscal projections. The sub-100 percent response rates in 87 of the 91 communities strongly indicate an understatement of the economic impact findings in most of the communities that are documented in this report.

In Boulder, 46 of the 175 eligible organizations identified by the City of Boulder Arts Commission responded to the survey, a response rate of 26 percent. The responding organizations in Boulder had a range of budgets from \$0 to \$1,027,864.

Surveys of Arts Audiences

An audience-intercept methodology (patrons at nonprofit arts events are asked to complete a survey while attending the event) was used to measure spending by audiences at nonprofit arts events during 2001. Seventy-five of the 91 participating communities collected data about audience spending. An average of 527 surveys were collected in each of the 75 communities at events ranging from museum exhibitions and arts festivals to opera performances and children's theater productions. The randomly selected respondents detailed spending on attendance-related activities such as meals, souvenirs, transportation, and lodging. Using total audience data for 2000 (collected from the participating nonprofit arts organizations), standard statistical methods were then used to derive a reliable estimate of total expenditures by attendees. The 40,000 audience-survey respondents were asked to provide information

about the entire party with whom they were attending. With an average of more than three individuals per survey reported on, these data actually represent the spending patterns of more than 100,000 attendees to nonprofit arts organizations—significantly increasing the reliability of the data.

In Boulder, audience-intercept surveys were collected from 236 arts event attendees.

Studying Economic Impact Using Input/Output Analysis

To derive the most reliable economic impact data, economists used the method of input/output analysis to measure the expenditures of the local nonprofit arts industry and their audiences. This method is a standard procedure for demonstrating the impact of expenditures on communities (and has also been basis for two Nobel Prize awards in economics). It is well suited for this study because the models can be customized specifically to each community to measure the industry directly and through the commerce that the industry creates. An input/output model is a system of mathematical equations that combines statistical methods and economic theory. It traces how many times a dollar is “re-spent” within the local economy and the economic impact of each of those rounds of spending. How can a dollar be re-spent? Consider the following example:

A theater company purchases a gallon of paint from the local hardware store for \$10 (this generates the “direct economic impact”). The hardware store then uses a portion of the \$10 to pay the sales clerk’s salary; the sales clerk re-spends some of the money for groceries; the grocery store in turn uses some of the money to pay its cashier; the cashier then spends some for the utility bill; and so on (these are the “indirect economic impacts”).

The model for each of the 91 communities is customized based on the local dollar flow between 533 finely detailed industries within that community. This was accomplished by using detailed data on employment, incomes, and government revenues provided by the U.S. Department of Commerce (e.g., County Business Patterns, Regional Economic Information System, Survey of State and Local Finance), local tax data (sales taxes, property taxes, and other local option taxes), as well as the survey data from nonprofit arts organizations and their audiences.

Conclusion

The nonprofit arts are a \$19.1 million industry in Boulder—one that supports 594 full-time jobs and generates \$11.9 million in local and state government revenue. Nonprofit arts organizations in Boulder, which spend \$7.9 million annually, leverage a remarkable \$11.3 million in additional spending by arts audiences—spending that pumps vital revenue into local restaurants, hotels, retail stores, parking garages, and other businesses. By demonstrating that investing in the arts yields economic benefits, *Arts & Economic Prosperity* lays to rest a common misconception: that communities support the arts at the expense of local economic development. This report shows conclusively that—locally as well as nationally—the arts mean business.

¹ *Giving and Volunteering in the United States 2000*, Independent Sector, 2001.

In Appreciation

This study could not have been completed without the cooperation of the 46 nonprofit arts organizations in Boulder that provided detailed financial information about their organization:

Arts and Humanities Assembly of Boulder, Arts Nova Singers, Blue Moon Dance Company, Boulder Arts Commission, Boulder Arts Resource, Boulder Bach Festival, Boulder Conservatory Theatre, Boulder Friends of Jazz, Boulder Historical Society and Museum, Boulder International Music Festival for Young Artists, Boulder Museum of Contemporary Art, Boulder Public Library, Boulder Public Library Film Program, Boulder Youth Choir, Cantabile Singers, Collage Children's Museum, Colorado Dance Festival, Colorado Mahlerfest, Colorado Music Festival, Colorado Shakespeare Festival, Dairy Center for the Arts, Frequent Flyer Productions, Guild Theatre, Imagination Makers Theatre, International Film Series, Interweave Dance Theatre, Kakes Studios, Leanin' Tree Museum of Western Art, Macky Auditorium Concert Hall, Many Mountains Moving, Mariposa Collective, Moon Festival, Municipal Channel 8 Public Television, Nomad Theatre, Open Door Dance Theatre, Open Studios, Rocky Mountain Chorale, Rocky Mountain Storytellers Guild, Selva Editions, Sound Circle, Storybrook Ballet, Treble Clef Theatre Company, Treehouse Press, Turning The Wheel Productions, Upstart Crow Theatre Company, and Village Arts Coalition.

Arts & Economic Prosperity was conducted by Americans for the Arts, the nation's leading nonprofit organization for advancing the arts in America. With a 40-year record of service, it is dedicated to representing and serving local communities and creating opportunities for every American to participate in and appreciate all forms of the arts.

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The 91 Participating Communities

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| ▪ Anchorage, AK | ▪ San Diego County, CA |
| ▪ Fairbanks, AK | ▪ Santa Clarita, CA |
| ▪ Homer, AK | ▪ Sonora, CA |
| ▪ Juneau, AK | ▪ Walnut Creek, CA |
| ▪ Ketchikan, AK | ▪ Boulder, CO |
| ▪ Chandler, AZ | ▪ Fort Collins, CO |
| ▪ Flagstaff, AZ | ▪ Washington, DC |
| ▪ Mesa, AZ | ▪ Dover, DE |
| ▪ Phoenix, AZ | ▪ Broward County, FL |
| ▪ Scottsdale, AZ | ▪ Indian River County, FL |
| ▪ Tempe, AZ | ▪ Miami-Dade County, FL |
| ▪ Western Maricopa County, AZ | ▪ St. Petersburg, FL |
| ▪ Glendale, CA | ▪ Fulton County, GA |
| ▪ Lodi, CA | ▪ Honolulu, HI |
| ▪ Pasadena, CA | ▪ Boise, ID |
| ▪ Placer County, CA | ▪ Oak Park, IL |

- Bloomington, IN
- Indianapolis, IN
- Tippecanoe County, IN
- Lawrence, KS
- Baton Rouge, LA
- Jefferson Parish, LA
- New Orleans, LA
- St. Tammany Parish, LA
- Gloucester, MA
- New Bedford, MA
- Worcester, MA
- Montgomery County, MD
- Prince George's County, MD
- Rockland, ME
- Detroit, MI
- Grand Haven, MI
- Lansing, MI
- Minneapolis, MN
- St. Cloud, MN
- St. Joseph, MO
- St. Louis, MO
- Missoula, MT
- Asheville, NC
- Forsyth County, NC
- Minot, ND
- Portsmouth, NH
- Monmouth County, NJ
- Newark, NJ
- Union County, NJ
- Santa Fe, NM
- Chemung County, NY
- Niagara County, NY
- Steuben County, NY
- Westchester County, NY
- Columbus, OH
- Dayton, OH
- Dublin, OH
- Springfield, OH
- Berks County, PA
- Erie County, PA
- Lehigh County, PA
- Northampton County, PA
- Memphis, TN
- Harris County, TX
- Northeast Tarrant County, TX
- Alexandria, VA
- Arlington County, VA
- Fairfax County, VA
- Bellingham, WA
- Beloit, WI
- Chippewa Valley, WI
- Door County, WI
- Fox Valley, WI
- Green Bay, WI
- Janesville, WI
- Madison, WI
- Milwaukee, WI
- Waukesha County, WI
- Wausau, WI